Research Article   **Ningsih et al.**

Teachers' Perceptions of Collaborative Learning Methods in Developing Children's Multiliteracies

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Abstract

This research investigates teachers' views on the role of cooperative pedagogy in the multiliteracies learning process for children at TK Al-Qur'an Bilingual Al-Azhar. This research is intended to contribute to the needs of the innovative pedagogy of early childhood education that incorporates the element of collaboration and multiliteracies from the education of the 21st century. This study employs a qualitative field research approach. Data was collected through in-depth interviews and participatory observations from three purposely selected participants: a classroom teacher, an assistant teacher and the school principal. Data collected were analyzed through the interactive model of Miles and Huberman. The results of the study point to the fact that teachers' knowledge of multiliteracies is significaantly poor and focuses only on reading and writing viz a viz the other components like the visual, digital, and socio-cultural of multiliteracies. Collaborative learning pedagogy, though frequently put into practice, is often a practice of simplistically defined group work and does not include genuine pedagogy of collaboration that incorporates shared responsibility and social meaning. The major weaknesses identified in this study were: poor pedagogical knowledge, inadequate in-service training, inadequate instructional materials, and lack of time. This multicase study provides new and significant evidence of the major consequence of misconceptions of collaborative pedagogy in an Islamic early childhood educational setting that severely limits the education of multiliteracies and illustrates the need to redefine collaboration and pedagogy of meaning constructively and not superficially as a way of grouping learners.

Keywords: Collaborative Learning, Multiliteracy, Early Childhood Education, Teacher Perception.

1. Introduction

The development of literacy in the field of early childhood education (ECE) serves as the starting point for life long education, development of the mind, and engagement in societal activities (Anning et al., 2008; Mauluddia & Solehuddin, 2023; Nur et al., 2024; Ramey & Ramey, 2023). Literacy in early childhood education has moved beyond basic reading and writing skills to education competencies such as the ability to use language for communication, interpret symbols, understand narratives, make meaning through visuals, and communicate efficiently in different situations. Children today have constant exposure to multimodal text consisting of pictures, sounds, symbols, and digital interfaces. Therefore, the framework for early childhood education and literacy must move beyond the use of print to the practice of multiliteracies (Kalantzis & Cope, 2023; Kim et al., 2023).

The use of the term multiliteracies in education refers to the ability of children to construct meaning through different representation and the engagement of varied social and cultural surroundings. The early childhood education settings, multiliteracies promotes the children's ability to respond adaptively and creatively and develop critical awareness as required in the 21st century Learning Environment (Amil et al., 2024; Huot et al., 2025; Papadopoulos & Bisiri, 2024). The development of multiliteracy has been shown to be more effective in children when it is embedded in interactive and collaborative learning environment, where children construct meaning actively as opposed to passively receiving the information (Krause, 2020; Valkonen et al., 2020; Zulauf-McCurdy et al., 2025).

Collaborative learning practices become relevant as a learning technique related to the development of multiliteracies. The concept pertains to specific instructional techniques that promote the engagement of learners in small groups in attainment of common objectives that necessitate interdependence, dialogic interaction, and the construction of social meaning (Johnson & Johnson, 1999). In the domain of early childhood education, the participative pedagogy of collaborative learning has the potential to advance not only the development of children's language and literacy skills, but also the growth of social competences, emotional self-regulation, and active learning (McKown et al., 2009; Siregar et al., 2024; Yusnidah et al., 2023). However, the potential of collaborative learning to achieve the stated objectives is predicated on the extent to which teachers possess the conceptual and pedagogical understanding necessary for the thoughtful design of educational learning activities that sufficiently promote the desired level of collaboration and not just the random aggregation of children in groups.

The challenge is also evident in the context of faith-based early childhood education, particularly in Quranic and bilingual Islamic kindergartens. While these institutions aim at the integration of moral education alongside the development of children's character and religious literacy, they also have to meet educational challenges at a global level towards multiliteracies and the 21st educational century skills. Although these studies have a strategic importance, the studies on multiliteracies in Islamic early childhood education are scantly available, particularly those that focus on teachers' conceptualization of and practices in collaborative learning.

Additional information about the current cohort of early learners, popularly referred to as Generation Alpha, should be highlighted. They are products of heavily digitized and multimodally communicative backgrounds (Belcher, 2017; Facchinetti, 2021; Grewal et al., 2022; Jewitt, 2013; Mauluddia & Yulindrasari, 2024). Such a shift in the nature of the learners calls for early childhood educators to engage in the implementation of innovative, participatory, and contextually relevant pedagogies. This is contextualized with the understanding that educators act as the main mediators in establishing learning environments that integrate and support the simultaneous development of the child's cognition, social relations, emotions, and literacy (Espinosa, 2002; Razfar & Gutierrez, 2013; Teeters et al., 2021). But in the absence of conceptual understanding and pedagogical support, educators are more likely to find the implementation of the multiliteracies framework to be a challenge.

Preliminary data from TK Al-Qur'an Bilingual Al-Azhar presents a contradiction between the objectives of multiliteracies collaborative learning and self-reported practices

within the classroom. Educators claim to implement cooperative pedagogy as part of the learning process all the time, though the actual classroom practices observed appear to be traditional group work devoid of genuine collaboration, where learners work in silos and are absent from shared responsibilities, discourse, and co-creation of meaningful tradework (Smith et al., 2005). Furthermore, educators' definitions of literacy are primarily narrowed to the rudimentary practices of reading and writing, with little to no incorporation of the visual, digital, and sociocultural aspects of literacy. This scenario mirrors educators' wider structural context within which they operate, characterized by inadequate professional development, absent educational mentorship, and limited resources to support their multiliteracies pedagogy.

Misconceptions of pedagogical theories is a great problem in educational pedagogy, including the belief that active learning pedagogy is no different from group work. This belief severely limits the exposure of children and educators to more sophisticated multiliteracy practices, including reading different forms of texts, creative ideation, and social knowledge construction. Lack of multiliteracies and collaborative pedagogy is a gap in educational development that can and should be addressed, viewing it as a structural problem rather than a personal absence of educational training.

This is how the current work expands the conversation about collaborative learning pedagogy in Islamic Early Childhood Education as the group work paradigm in this context limits multiliteracy development beyond the foundational literacies. Situating the observed problem in a bilingual Quranic Kindergarten offers a distinctive contribution to the context and conceptual understanding of the intersection of religiously affiliated education, teacher educational beliefs, and the multiliteracies of the 21st education. This is how the research is intended to enrich the multiliteracies scholarship, showing how institutional, educational, and conceptual paradigms influence educators' practices, especially while restraining collaborative learning pedagogy in Early Childhood Education from fulfilling its transformational promise.

This research seeks to find out what teachers at Al-Qur'an Bilingual Al-Azhar think about the incorporation of collaborative learning to enhance children's multiliteracies. This research emphasizes teachers' understanding, conceptualization, and enactment of multiliteracies in everyday teaching practices; the difficulties they face in collaborative teaching; and the obstacles they experience in implementing collaborative teaching. This research is expected to complement the literature on multiliteracies in the context of faith-based early childhood education and help improve teachers' ability to develop contextually and collaboratively focused 21st century pedagogy.

2. Methods

This study adopts a qualitative approach with a field research design to explore teachers' perceptions, experiences, and instructional practices related to collaborative learning and multiliteracies in early childhood education. A qualitative approach was selected because it enables an in-depth understanding of meaning-making processes, pedagogical interpretations, and contextual realities within natural educational settings (Babchuk, 2016; Creswell & Creswell, 2017). Field research is particularly appropriate for examining how educational concepts are enacted in everyday classroom practices rather than merely prescribed at the policy or curriculum level (Denzin, 2012).

The research site, TK Al-Qur'an Bilingual Al-Azhar in Kediri, was purposively selected because the institution formally implements collaborative learning while simultaneously facing challenges in integrating multiliteracy principles into classroom practice. Such purposive site selection aligns with qualitative inquiry aimed at information-rich cases that illuminate the phenomenon under study (Murni, 2017). Participants consisted of three key informants: a classroom teacher (IH), an assistant teacher (WAS), and the school principal (LKM). These participants were selected through purposive sampling due to their direct involvement in instructional planning, classroom implementation, and institutional decision-making related to collaborative learning (Assyakurrohim et al., 2022).

Data collection employed two primary techniques. First, in-depth semi-structured interviews were conducted to explore participants' conceptual understanding, pedagogical beliefs, and lived experiences in implementing collaborative and multiliteracy-oriented learning. Semi-structured interviews allow flexibility while ensuring consistency across participants, making them suitable for educational perception studies (Kallio et al., 2016). Second, participatory classroom observations were carried out to capture authentic teaching practices, learning activities, and children's interactions during collaborative tasks. Classroom observation is essential in early childhood research to triangulate self-reported data with actual pedagogical practices (Anning et al., 2008; Dr. Drs. Thobby Wakarmamu, 2021).

Data analysis followed Miles and Huberman's interactive model, which consists of data reduction, data display, and conclusion drawing/verification (Utomo et al., 2020). This iterative analytical process enables continuous movement between data collection and interpretation, allowing patterns, themes, and relationships to emerge inductively. To enhance trustworthiness and rigor, data validity was ensured through methodological triangulation by comparing interview findings with observational data and relevant documentation (Lincoln, 1985). Member checking was also conducted by sharing preliminary interpretations with participants to confirm accuracy and credibility, a widely recognized strategy for strengthening qualitative validity in educational research (Sugiyono, 2011).

3. Results and Discussion

The findings derived from this research were gained from conducting interviews and participatory observations in class which were done in TK Al-Qur'an Bilingual Al-Azhar. The findings show how the teachers view the concept of multiliteracies, how the practice of collaborative learning is integrated in the everyday teaching practice, and the specific contextual constraints that influence the practice in the setting of early childhood education. The researches show that there is a gap in the teachers' understanding of multiliteracies in the form of literacy, as this understanding was almost solely restricted to various aspects of basic literacy, especially reading, writing and letter recognition. So was the classroom teacher, and the head of the school consistently described literacy as the ability of a child to read a simple narrative and recognize letters, as well as be able to write that narrative correctly. The learning of literacy is generally conducted in the form of worksheets (Lembar Kerja Anak/LKA) which require children to trace letters, writing a word, and fill in a short answer to a question. In the teachers' opinion, literacy learning is

said to be successful if children are able to do the task independently and accurately in a short period of time.

This institution's practices serve to further entrench this view of literacy. The principal stated and showcased evidence of literacy learning implementation by mentioning and showing the presence of book corners in classrooms and the availability of a school library. Observations show that children are encouraged to practice independent reading of books and that this is done during designated literacy sessions and/or during free-play. The reading practices are extensive in scope but are conducted in silence and do not allow for peer discussion, interpretation, or interaction. Literacy instruction, in this case, is focused on the individual's cognitive achievement rather than on peer collaboration for meaning making or on the use of multiple modalities.

The findings suggest that, at best, the teachers have a very limited understanding of multiliteracies. This is in the sense of, and in the example of, visual, digital, media, and socio-cultural literacies being integrated. Teachers during interviews did not mention these dimensions at all or do so very cursorily when referencing their goals for instruction and their practices in the classroom. In the classrooms, visual elements like pictures, posters, and illustrated story books are present, but these materials serve mainly a secondary or ornamental function rather than a primary one in literacy learning. Children are not encouraged to interpret visuals, make personal connections, or show their understanding through other means like drawing, storytelling, and role-play. In the same way, digital media contribute even less to the literacy instruction. Although the school has a bilingual orientation and contemporary school marketing, there are no systematic approaches to integrating digital tools into the literacy activities. When digital devices are available, they are used as presentation tools, and the teacher exercises control while students are passive. This, in turn, severely limits the children's ability to interact with the many different texts and the multiliteracy skills they are able to develop.

Another significant finding relates to the professional development of the educators. One of the classroom teachers indicated that she had never had any training in multiliteracy or modern literacy pedagogy. The professional development provided by the institution focuses primarily on classroom management, religious teaching, and administrative issues, and does not contribute to any teaching innovations. This lack of training fosters fallacies about multiliteracy and creates a vicious circle in which the teachers over-rely, in a somewhat comforting way on traditional literacy practices that are based on worksheets and teacher-centered instruction. With regards to partnerships in instruction, it seems that teachers often report using collaborative strategies in their teaching. One assistant teacher said that collaborative learning was more likely to happen during outdoor times, which are seen to be more relaxed and encourage grouping. Yet observations of the classroom show that the kinds of learning tasks being constructed do not change greatly according to the place in which they are situated. Whether they are indoors or outdoors, the tasks are mainly individual ones like coloring, letter writing, or worksheet completion. The only change in the activity lies in the place of learning, not in the activity's educational design.

Even when children are grouped at tables or are in the same learning area, the activities do not call for any collaboration, discussion, or coordinated-solving of a problem. Each child is expected to do the task individually, and the results are analyzed individually,

not as a group. Assessment is not done in a group manner, and teachers do not give divided responsibilities, or aim a coordinated interaction of the children during the tasks. Consequently, the situation in class is more like group individual work, rather than collaborative learning. Data collected from observations suggest that social interactions while pursuing literacy activities are minimal. At the start of the session, the teacher gives instructions, and then, subsequently, she does rounds and supervises the children's independent work. Children's interaction and collaboration are often curtailed, more so, when it is seen as disruptive. Teachers often divert children's attention to their independent work when they are talking, questioning, or sharing with peers. This custom strengthens the individualistic culture of learning and the absence of opportunities for collective sense-making.

In the interviews, the teachers displayed a strong positive disposition towards collaboration, even with its absence in the classroom. In their views, the absence of collaboration does a disservice to the social development, discipline, and character building of the children. On the other hand, the absence of collaboration is predominantly understood from the behavioral aspect of sharing space and resources, adjacency, and turn-taking, rather than as the absence of a teaching/learning situation that promotes the development of higher-order thinking skills and discourse. Teachers lack the discourse that connects multiliteracies and collaborative learning, which indicates that there is a lack of a unified understanding of the interdependence of teaching and learning objectives.

The reported results illuminate a number of contextual challenges impacting the enactment of collaborative multiliteracy frameworks. One particularly salient challenge is the nature of the classroom and the developmental stage of the children. Teachers describe children between the ages of five and six as very active, easily distracted, and requiring a lot of monitoring. Teachers describe keeping children focused during large group instruction as particularly challenging, and as a result have to restrict the cognitive demands of the tasks to minimize interaction and maintain control of the classroom. Observation data substantiate that children shift their attention, talk off topic, and stand up and wander around the room during large group instruction.

The nature of the children's literacy abilities and how varied they are in the same classroom is another challenge. Teachers report that the range of children's abilities in reading and writing is considerable, making it difficult to plan for collaborative tasks. In large groups, children with advanced literacy skills are able to perform the tasks in a short amount of time, which is in contrast to the children who have lower literacy skills as they may end up either disengaging completely or become passive participants. Teachers respond to this challenge by designing the same tasks for all children, which emphasizes independent work rather than collaboration along with differentiation. A lack of teaching materials emerges as another significant challenge. Educators indicate that group work necessitates the use of large paper rolls, markers, paper, instructional visuals, and other teaching tools. These additional resources are sometimes inaccessible, and teachers have to prepare them by themselves, which increases the workload and prevents the use of highly interactive pedagogy. As a result, teachers use worksheets and other resources that are more comfortable to use given the other challenges.

The other challenge is the lack of time that is needed to implement group work. Educators report that their days are filled to the brim with a religious portion, Quran

memorization (*tahfidz*), decent character instruction, and other regular activities that are done in the classroom. Since group work takes time to explain, interact and reflect, it is the first to be reduced or omitted to ensure that there is time to do the rest of the activities in the schedule. In the observations, it is evident that the literacy blocks are very short, and there is a focus on finishing the work as opposed to deeper exploration and discussion. While the educators admitted their expertise and readiness to undertake new pedagogical practices is limited, they were hesitant to begin incorporating literacy into the design of group activities where they were unsure about how to incorporate literacy into the design of group activities, how to facilitate and evaluate interactive group work. Also, without instruction and training, teachers tend to focus on design, order, and control of tasks, rather than on the creative aspects of interaction. Consequently, group work is often seen as an organizational arrangement rather than a strategy to innovate pedagogically and create the conditions for multiliteracy to thrive.

Table 1. Summary of Empirical Findings on Collaborative Multiliteracy Practices

No	Theme	Subtheme	Empirical Evidence
1.	Understanding of multiliteracy	Literacy as reading and writing	Teachers define literacy as letter recognition, reading, and writing through worksheets (LKA); literacy success measured by task completion
		Limited multimodal literacy	Visual and digital materials used minimally and not framed as literacy practices
		Lack of training	Teachers report no formal training on multiliteracy or contemporary literacy pedagogy
2.	Collaborative learning practices	Group-based individual work	Children sit in groups but complete tasks individually without shared goals
		Limited interaction	Peer interaction discouraged during literacy activities
		Behavioral view of collaboration	Collaboration understood as sharing materials or sitting together
3.	Contextual challenges	Classroom dynamics	Children easily distracted; teachers prioritize control and efficiency
		Diverse literacy abilities	Variation in skills leads to uniform, individual tasks
		Resource constraints	Limited learning media; reliance on worksheets
		Time constraints	Tight schedules reduce opportunities for collaborative learning
		Pedagogical readiness	Teachers lack confidence in designing collaborative multiliteracy activities

4. Discussion
Teachers' Understanding of Multiliteracy is Alarming

The data illuminated the concept of multiliteracy education as a primary understanding of basic literacy being the ability to read and write. This is consistent with previously published work that shows early years educators have a tendency to define literacy and multiliteracy as print-based literacy competencies despite the increasing need to situate literacy education within a broader scope of multiliteracies as a sociocultural practice (Anning et al., 2008; Kalantzis & Cope, 2023; Kim et al., 2023; Ukamaka &

Extension, 2024). The impacts of this limited understanding demonstrates a global issue of translating multiliteracies into real-world concepts practiced in early childhood education. Although multiliteracies frameworks highlight meaning creation within and across various forms and contexts, classroom application is a real problem due to the teacher's understanding of the education pedagogy and underlying gaps in theory. Consequently, literacy teaching instuctions focus on measurable individual outcomes such as the completion of a worksheet, instead of focusing on the understanding of the material via dialogue and creative expression as a whole.

In teacher pedagogy, the limited knowledge of multiliteracy teaching and learning constrains the constructive development of learning spaces that foster and encourage children's engagement with the different forms of meaning. Much of the early childhood education carried out in the field recognizes that teachers are key in supporting the development of multiliteracies when they are able to interconnect literacy activities with children's lived experiences and social and cultural background and digital technologies present in their environments as pointed out in Anning, 2018 and Fleer, 2021. A consummate reduction of literacy activities to individual tasks on worksheets lessen the spaces available for dialogic interactions, creativity and collaborations which results in the fragmentation of children's literacy learning (Anning et al., 2008; Devi et al., 2021; Fleer, 2024). Participants' reports of lacking structured literacy or multiliteracy training also compounds this challenge. Teaching pedagogical beliefs for the practice of instruction are influenced by the design of the practitioners' professional learning in primary education, as teaching in early years is highly situated and relational (Hadar et al., 2020). Teachers are likely to continue the duplication of the conventional literacy practices that emphasize the individual cognition achievement, as opposed to the social, multimodal, and participatory learning processes (OECD, 2021) in the absence of professional development practices targeting multiliteracies. The absence of practice in the classroom, in contrast to the multiliteracies theory, is indicative of limits within the system in terms of professional support (Wang et al., 2021).

Multiliteracy, Social Constructivism, and the Role of the Teacher in the Findings Across the Empirical Evidence can also be explained through the Social Constructivism of Vygotsky. Within this paradigm, mediators, that is the teachers, are central to scaffolding children's participation in the construction of meaning through collaboration in shared, socially interactive, and dialogic activities (Salas-Fumás, 2010). Vygotsky's Social Constructivism theory principles emphasize that in learning there is no individualistic disengagement. In learning, participants ought to collaborate and interact to achieve the construction of meaning. In this regard, multiliteracies pedagogy considers that a learning process is a social collaboration in the construction of meaning, which children are able to negotiate in different modes, be it verbal, visual, or digital (Kalantzis & Cope, 2023).

Nonetheless, the evidence shows that teachers especially do not have a deep enough understanding of multiliteracy principles, where this mediation construction is not functioning at its fullest potential. Even though collaborative learning has been officially introduced, it has been a case of 'working together individually' rather than genuine collaboration in the sense of a common goal, active interdependency, and dialogical engagement. Such procedural models of collaboration diminish children's potential for collective meaning construction and render collaborative learning of multiliteracy ill-

supported. Children have been shown in the literature, and indeed previously in this manuscript, to have the opportunity to collaborate meaningfully to create, interpret, and communicate across and within several (literacy) modes, multiliteracies and to communicate meaning to multiliteracy (Kalantzis & Cope, 2023; Kim et al., 2023; Valkonen et al., 2020). In these frameworks, the digital; the visual; and the oral representational forms serve as semiotic resources that collectively enhance understanding. Conversely, a collaboration that is physically constituted alone as a grouping of learners represents very little contribution to the development of multiliteracies. Thus, this study's findings illustrate the significance of not viewing collaboration as a classroom management option but a genuine pedagogical strategy that promotes the construction of social and meaning – in multiple modes.

Consequences of Teacher Professional Development.

The research emphasizes the importance of professional training of teachers in neglecting the multiliteracy esoteric/multiliteracy theories and praxis in pedagogy. Professional training program and pedagogy of multiliteracy and multiliteracies in pedagogy initiatives in knowing and multiliteracy. Within multiliteracy pedagogy social constructivism and project oriented cross curricular pedagogy supported and integrated better to preschool. In working with adolescents in her research project, Fleer (2021) identifies teachers as actors and project (Anning et al., 2008; Devi et al., 2021; Fleer, 2024), OECD (2021) identifies teachers as multicultural and as social relationship. Moreover, teachers "communities of practice" assist in promoting innovative teaching through reflection (Citaristi, 2022; Criscuolo et al., 2022; Wang et al., 2021). These practice communities to support peers in their own practice and to introduce and develop collaborative multiliteracies pedagogy (Cuddy, 2002; Wenger et al., 2002). With the expectations of collaboration, communities develop a shared pedagogy, a community's literacy.

The data also state that social constructivism pedagogy, when supported sufficiently and appropriately, leads to student involvement and better literacy outcomes (Hilmawan et al., 2022; Mislia et al., 2021). With support of neglecting technical `e' skills, a practice should be refined to foster the dialogue, pedagogy, and design of collaboration within a community. The conceptual change as well as pedagogical skills of the teachers must be developed in order to shift the focus of early childhood literacy instruction from the teaching of isolated skills to the incorporation of a more comprehensive multiliteracies approach. This shift will allow the teaching of literacy to be more fully integrated in relation to the cognitive, social, cultural, and digital aspects to make early childhood education more relevant to the learning context of the 21st century.

Table 1. Empirical Findings on Multiliteracy and Collaborative Learning Practices

No.	Theme	Subtheme	Key Empirical Findings	Evidence from Data	Data Source
1.	Teachers' understanding of multiliteracy	Literacy as basic skills	Literacy is understood mainly as reading, writing, and letter recognition	Teachers emphasize worksheet-based (LKA) reading and writing as indicators of literacy achievement	Interview (IH, LKM), Observation

		Institutional view of literacy	Literacy implementation is associated with physical resources	Book corners and library availability are cited as evidence of literacy practice	Interview (LKM), Observation
		Limited multimodal literacy	Visual, digital, and socio-cultural literacies are not explicitly recognized	Images and posters used decoratively; no interpretive or dialogic activities observed	Interview, Observation
		Absence of professional training	Teachers have not received multiliteracy-related training	Teachers report no formal training on multiliteracy or contemporary literacy pedagogy	Interview (IH)
2.	Collaborative learning practices	Collaboration as grouping	Collaborative learning equated with placing children in groups	Children sit in groups but complete tasks individually	Interview (WAS), Observation
		Individualized task structure	Learning tasks do not require cooperation or shared goals	Coloring, writing, and worksheet activities completed independently	Observation
		Limited peer interaction	Interaction among children during literacy tasks is minimal	Teachers redirect peer talk to maintain focus on individual work	Observation
		Behavioral view of collaboration	Collaboration understood as sharing materials or sitting together	Teachers emphasize turn-taking and discipline rather than joint meaning-making	Interview
3.	Contextual challenges	Classroom dynamics	Children are highly active and easily distracted	Teachers simplify tasks and limit interaction to maintain control	Interview (LKM), Observation
		Diversity of literacy abilities	Wide variation in children's literacy skills	Higher-skilled children finish early; others struggle or remain passive	Interview (IH), Observation
		Resource constraints	Limited availability of collaborative learning media	Teachers rely on worksheets due to lack of materials	Interview
		Time constraints	Tight schedules limit collaborative activities	Literacy sessions shortened due to tahfidz and character education	Interview (LKM)
		Pedagogical readiness	Teachers lack confidence in designing collaborative multiliteracy activities	Teachers express uncertainty in managing group dynamics and assessing collaboration	Interview

The empirical regularities in teachers' understanding of multiliteracy and the implementation of participation in collective learning as well as the situational limitations that influence shaping practice within the classroom are presented in Table 2. The table integrates the interviews and observations to demonstrate the alignment of teachers' conceptions and classroom practices as reported in different data sets. The results of the narratives presented in this chapter are summarized in Table 2 to improve clarity and transparency in the analysis. While the narrative further enriches the analyses with the in-depth description of the participants, the classroom, and the contextual surrounding, the table evidence the description to themes and subthemes in a structured manner with empirical findings from interviews and observations. The intent of this structure is to allow the narrative section to present in-depth discussion of the data, while the table provides a clear and concise analytical framework of the data sets and highlights the thematic and sub-thematic intersections.

The description of instructors' limited understanding of multiliteracy, the collaborative learning framework, and the surrounding constraints of the educational setting are ingeniously depicted in Table 2 with characteristics and evidence. This table does not introduce new findings; rather, it consolidates and organizes the empirical patterns already covered in the text, increasing internal consistency, and making sure that interpretations are based on the data. The meticulous combination of narrative explanation and tabulated data helps the Results section avoid redundancy, in keeping with the qualitative reporting standards in Scopus and Elsevier indexed journals.

5. Conclusions

This study concludes that collaborative learning in Islamic early childhood education has not yet functioned as an effective pedagogy for multiliteracy development due to teachers' limited conceptual understanding of multiliteracy. Literacy is predominantly understood as basic reading and writing skills, while visual, digital, media, and socio-cultural dimensions remain marginal in classroom practice. Although collaborative learning is frequently reported, empirical evidence indicates that it is largely implemented as group-based individual work rather than authentic collaboration involving shared responsibility, dialogue, and collective meaning-making. This condition is reinforced by structural and pedagogical constraints, including limited pedagogical competence, inadequate in-service training, insufficient instructional resources, and restricted instructional time.

The main contribution of this study lies in its empirical demonstration that misconceptions of collaborative pedagogy (particularly the conflation of collaboration with group work) systematically constrain multiliteracy development in Islamic early childhood education settings. By situating the analysis within a Quranic bilingual kindergarten context, this research extends multiliteracies scholarship into a faith-based educational environment that remains underexplored. The findings underscore the need to reconceptualize collaboration as a social and multimodal meaning-making process and to strengthen teachers' conceptual and pedagogical capacity through sustained professional development, thereby advancing holistic, context-sensitive, and future-oriented early childhood literacy education.

6. CRediT Authorship Contribution Statement

Risa Wahyuni Ningsih, and Lathifatul Fajriyah: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Investigation, Project administration, Resources, Writing – original draft, and Writing – review & editing. **Revina Rizqiyani:** Conceptualization, Supervision, Validation, and Writing – review & editing.

7. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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9. Data Availability

Data will be made available on request.

10. References

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